

Sequence Listing

<110> Baker, Kevin
 Botstein, David
 Eaton, Dan
 Ferrara, Napoleone
 Filvaroff, Ellen
 Gerritsen, Mary
 Goddard, Audrey
 Godowski, Paul
 Grimaldi, Christopher
 Gurney, Austin
 Hillan, Kenneth
 Kljavin, Ivar
 Napier, Mary
 Roy, Margaret
 Tumas, Daniel
 Wood, William

<120> SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 ACIDS ENCODING THE SAME

<130> P2548P1C1

<150> 60/067,411

<151> December 3, 1997

<150> 60/069,334

<151> December 11, 1997

<150> 60/069335

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<151> December 12, 1997

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<151> December 17, 1997

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<151> December 17, 1997

<150> 60/068,017

<151> December 18, 1997

<150> 60/070,440

| Table 1. Demographic characteristics of the study population | |
|--|---------------|
| Characteristic | Frequency (%) |
| Age (years) | |
| < 18 | 10 (10.0) |
| 18-24 | 25 (25.0) |
| 25-34 | 30 (30.0) |
| 35-44 | 20 (20.0) |
| 45-54 | 15 (15.0) |
| ≥ 55 | 10 (10.0) |
| Sex | |
| Male | 45 (45.0) |
| Female | 45 (45.0) |
| Ethnicity | |
| White | 30 (30.0) |
| Black | 15 (15.0) |
| Hispanic | 10 (10.0) |
| Other | 5 (5.0) |
| Marital status | |
| Married | 30 (30.0) |
| Single | 15 (15.0) |
| Divorced | 10 (10.0) |
| Widowed | 5 (5.0) |
| Education level | |
| High school or less | 10 (10.0) |
| Some college | 15 (15.0) |
| Bachelor's degree | 20 (20.0) |
| Master's degree | 10 (10.0) |
| PhD or higher | 5 (5.0) |
| Annual income (\$) | |
| < 10,000 | 10 (10.0) |
| 10,000-19,999 | 15 (15.0) |
| 20,000-29,999 | 10 (10.0) |
| 30,000-39,999 | 10 (10.0) |
| 40,000-49,999 | 10 (10.0) |
| ≥ 50,000 | 10 (10.0) |

<151> February 22, 2000

700630 TSE4660

<150> PCT/US00/05841

<151> March 2, 2000

<150> PCT/US00/08439

<151> March 30, 2000

<150> PCT/US00/14042

<151> May 22, 2000

<150> PCT/US00/20710

<151> July 28, 2000

<150> PCT/US00/32678

<151> December 1, 2000

<150> PCT/US01/06520

<151> February 28, 2001

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<213> Homo Sapien

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| Variable | Mean | SD | Min | Max |
|------------------------|------|------|-----|------|
| Age | 38.5 | 12.5 | 20 | 65 |
| Gender | 0.5 | 0.5 | 0 | 1 |
| Marital status | 0.6 | 0.5 | 0 | 1 |
| Education | 12.5 | 2.5 | 9 | 16 |
| Income | 1500 | 500 | 500 | 3000 |
| Health status | 0.8 | 0.2 | 0 | 1 |
| Stress level | 3.5 | 1.5 | 1 | 5 |
| Life satisfaction | 4.0 | 1.0 | 1 | 5 |
| Work satisfaction | 3.8 | 1.2 | 1 | 5 |
| Family satisfaction | 4.2 | 1.1 | 1 | 5 |
| Community satisfaction | 3.9 | 1.3 | 1 | 5 |
| Overall satisfaction | 3.7 | 1.4 | 1 | 5 |

| | | | | | | | | | | | | | | |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
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| Met | Lys | Glu | Tyr | Val | Leu | Leu | Leu | Phe | Leu | Ala | Leu | Cys | Ser | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |
| Lys | Pro | Phe | Phe | Ser | Pro | Ser | His | Ile | Ala | Leu | Lys | Asn | Met | Met |
| | | | | 20 | | | | | 25 | | | | | 30 |
| Leu | Lys | Asp | Met | Glu | Asp | Thr | Asp | Asp | Asp | Asp | Asp | Asp | Asp | Asp |
| | | | | 35 | | | | | 40 | | | | | 45 |
| Asp | Asp | Asp | Asp | Asp | Glu | Asp | Asn | Ser | Leu | Phe | Pro | Thr | Arg | Glu |
| | | | | 50 | | | | | 55 | | | | | 60 |
| Pro | Arg | Ser | His | Phe | Phe | Pro | Phe | Asp | Leu | Phe | Pro | Met | Cys | Pro |
| | | | | 65 | | | | | 70 | | | | | 75 |
| Phe | Gly | Cys | Gln | Cys | Tyr | Ser | Arg | Val | Val | His | Cys | Ser | Asp | Leu |
| | | | | 80 | | | | | 85 | | | | | 90 |
| Gly | Leu | Thr | Ser | Val | Pro | Thr | Asn | Ile | Pro | Phe | Asp | Thr | Arg | Met |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Leu | Asp | Leu | Gln | Asn | Asn | Lys | Ile | Lys | Glu | Ile | Lys | Glu | Asn | Asp |
| | | | | 110 | | | | | 115 | | | | | 120 |
| Phe | Lys | Gly | Leu | Thr | Ser | Leu | Tyr | Gly | Leu | Ile | Leu | Asn | Asn | Asn |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Lys | Leu | Thr | Lys | Ile | His | Pro | Lys | Ala | Phe | Leu | Thr | Thr | Lys | Lys |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Leu | Arg | Arg | Leu | Tyr | Leu | Ser | His | Asn | Gln | Leu | Ser | Glu | Ile | Pro |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Leu | Asn | Leu | Pro | Lys | Ser | Leu | Ala | Glu | Leu | Arg | Ile | His | Glu | Asn |
| | | | | 170 | | | | | 175 | | | | | 180 |
| Lys | Val | Lys | Lys | Ile | Gln | Lys | Asp | Thr | Phe | Lys | Gly | Met | Asn | Ala |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Leu | His | Val | Leu | Glu | Met | Ser | Ala | Asn | Pro | Leu | Asp | Asn | Asn | Gly |
| | | | | 200 | | | | | 205 | | | | | 210 |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Glu | Pro | Gly | Ala | Phe | Glu | Gly | Val | Thr | Val | Phe | His | Ile | Arg |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Ile | Ala | Glu | Ala | Lys | Leu | Thr | Ser | Val | Pro | Lys | Gly | Leu | Pro | Pro |
| | | | | 230 | | | | | 235 | | | | | 240 |
| Thr | Leu | Leu | Glu | Leu | His | Leu | Asp | Tyr | Asn | Lys | Ile | Ser | Thr | Val |
| | | | | 245 | | | | | 250 | | | | | 255 |
| Glu | Leu | Glu | Asp | Phe | Lys | Arg | Tyr | Lys | Glu | Leu | Gln | Arg | Leu | Gly |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Leu | Gly | Asn | Asn | Lys | Ile | Thr | Asp | Ile | Glu | Asn | Gly | Ser | Leu | Ala |
| | | | | 275 | | | | | 280 | | | | | 285 |
| Asn | Ile | Pro | Arg | Val | Arg | Glu | Ile | His | Leu | Glu | Asn | Asn | Lys | Leu |
| | | | | 290 | | | | | 295 | | | | | 300 |
| Lys | Lys | Ile | Pro | Ser | Gly | Leu | Pro | Glu | Leu | Lys | Tyr | Leu | Gln | Ile |
| | | | | 305 | | | | | 310 | | | | | 315 |
| Ile | Phe | Leu | His | Ser | Asn | Ser | Ile | Ala | Arg | Val | Gly | Val | Asn | Asp |
| | | | | 320 | | | | | 325 | | | | | 330 |
| Phe | Cys | Pro | Thr | Val | Pro | Lys | Met | Lys | Lys | Ser | Leu | Tyr | Ser | Ala |
| | | | | 335 | | | | | 340 | | | | | 345 |
| Ile | Ser | Leu | Phe | Asn | Asn | Pro | Val | Lys | Tyr | Trp | Glu | Met | Gln | Pro |
| | | | | 350 | | | | | 355 | | | | | 360 |
| Ala | Thr | Phe | Arg | Cys | Val | Leu | Ser | Arg | Met | Ser | Val | Gln | Leu | Gly |
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| ccagagacca | gaactgatcc | agagctggag | aaagaagccg | aaggctctta | 3000 |
| gggagcagcc | agagggccaa | gtgaccaaga | ggatggggcc | tgagctgggg | 3050 |
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| cctttgctcc | tctgtcctgc | ctctactccc | accccacta | cctctgggaa | 3150 |
| ccacagctcc | acaaggggga | gaggcagctg | ggccagaccg | aggtcacagc | 3200 |
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| ccctttcctc | ctgtacataa | tgtcactggc | ttgttgggat | ttttaattta | 3300 |
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| gctgagcaga | gtcattattg | gagagttttg | tatttattaa | aacatttctt | 3400 |
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              20              25              30

Pro  Pro  Val  Leu  Pro  Ile  Arg  Ser  Glu  Lys  Glu  Pro  Leu  Pro  Val
              35              40              45

Arg  Gly  Ala  Ala  Gly  Cys  Thr  Phe  Gly  Gly  Lys  Val  Tyr  Ala  Leu
              50              55              60

Asp  Glu  Thr  Trp  His  Pro  Asp  Leu  Gly  Gln  Pro  Phe  Gly  Val  Met
              65              70              75

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| | | | | | | | | | | | | | | |
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| Thr | Arg | Gly | Pro | Gly 95 | Arg | Val | Ser | Cys | Lys 100 | Asn | Ile | Lys | Pro | Glu 105 |
| Cys | Pro | Thr | Pro | Ala 110 | Cys | Gly | Gln | Pro | Arg 115 | Gln | Leu | Pro | Gly | His 120 |
| Cys | Cys | Gln | Thr | Cys 125 | Pro | Gln | Glu | Arg | Ser 130 | Ser | Ser | Glu | Arg | Gln 135 |
| Pro | Ser | Gly | Leu | Ser 140 | Phe | Glu | Tyr | Pro | Arg 145 | Asp | Pro | Glu | His | Arg 150 |
| Ser | Tyr | Ser | Asp | Arg 155 | Gly | Glu | Pro | Gly | Ala 160 | Glu | Glu | Arg | Ala | Arg 165 |
| Gly | Asp | Gly | His | Thr 170 | Asp | Phe | Val | Ala | Leu 175 | Leu | Thr | Gly | Pro | Arg 180 |
| Ser | Gln | Ala | Val | Ala 185 | Arg | Ala | Arg | Val | Ser 190 | Leu | Leu | Arg | Ser | Ser 195 |
| Leu | Arg | Phe | Ser | Ile 200 | Ser | Tyr | Arg | Arg | Leu 205 | Asp | Arg | Pro | Thr | Arg 210 |
| Ile | Arg | Phe | Ser | Asp 215 | Ser | Asn | Gly | Ser | Val 220 | Leu | Phe | Glu | His | Pro 225 |
| Ala | Ala | Pro | Thr | Gln 230 | Asp | Gly | Leu | Val | Cys 235 | Gly | Val | Trp | Arg | Ala 240 |
| Val | Pro | Arg | Leu | Ser 245 | Leu | Arg | Leu | Leu | Arg 250 | Ala | Glu | Gln | Leu | His 255 |
| Val | Ala | Leu | Val | Thr 260 | Leu | Thr | His | Pro | Ser 265 | Gly | Glu | Val | Trp | Gly 270 |
| Pro | Leu | Ile | Arg | His 275 | Arg | Ala | Leu | Ala | Ala 280 | Glu | Thr | Phe | Ser | Ala 285 |
| Ile | Leu | Thr | Leu | Glu 290 | Gly | Pro | Pro | Gln | Gln 295 | Gly | Val | Gly | Gly | Ile 300 |
| Thr | Leu | Leu | Thr | Leu 305 | Ser | Asp | Thr | Glu | Asp 310 | Ser | Leu | His | Phe | Leu 315 |
| Leu | Leu | Phe | Arg | Gly 320 | Leu | Leu | Glu | Pro | Arg 325 | Ser | Gly | Gly | Leu | Thr 330 |
| Gln | Val | Pro | Leu | Arg 335 | Leu | Gln | Ile | Leu | His 340 | Gln | Gly | Gln | Leu | Leu 345 |
| Arg | Glu | Leu | Gln | Ala 350 | Asn | Val | Ser | Ala | Gln 355 | Glu | Pro | Gly | Phe | Ala 360 |
| Glu | Val | Leu | Pro | Asn | Leu | Thr | Val | Gln | Glu | Met | Asp | Trp | Leu | Val |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|
| | | | | 365 | | | | | 370 | | | | | 375 |
| Leu | Gly | Glu | Leu | Gln 380 | Met | Ala | Leu | Glu | Trp 385 | Ala | Gly | Arg | Pro | Gly 390 |
| Leu | Arg | Ile | Ser | Gly 395 | His | Ile | Ala | Ala | Arg 400 | Lys | Ser | Cys | Asp | Val 405 |
| Leu | Gln | Ser | Val | Leu 410 | Cys | Gly | Ala | Asp | Ala 415 | Leu | Ile | Pro | Val | Gln 420 |
| Thr | Gly | Ala | Ala | Gly 425 | Ser | Ala | Ser | Leu | Thr 430 | Leu | Leu | Gly | Asn | Gly 435 |
| Ser | Leu | Ile | Tyr | Gln 440 | Val | Gln | Val | Val | Gly 445 | Thr | Ser | Ser | Glu | Val 450 |
| Val | Ala | Met | Thr | Leu 455 | Glu | Thr | Lys | Pro | Gln 460 | Arg | Arg | Asp | Gln | Arg 465 |
| Thr | Val | Leu | Cys | His 470 | Met | Ala | Gly | Leu | Gln 475 | Pro | Gly | Gly | His | Thr 480 |
| Ala | Val | Gly | Ile | Cys 485 | Pro | Gly | Leu | Gly | Ala 490 | Arg | Gly | Ala | His | Met 495 |
| Leu | Leu | Gln | Asn | Glu 500 | Leu | Phe | Leu | Asn | Val 505 | Gly | Thr | Lys | Asp | Phe 510 |
| Pro | Asp | Gly | Glu | Leu 515 | Arg | Gly | His | Val | Ala 520 | Ala | Leu | Pro | Tyr | Cys 525 |
| Gly | His | Ser | Ala | Arg 530 | His | Asp | Thr | Leu | Pro 535 | Val | Pro | Leu | Ala | Gly 540 |
| Ala | Leu | Val | Leu | Pro 545 | Pro | Val | Lys | Ser | Gln 550 | Ala | Ala | Gly | His | Ala 555 |
| Trp | Leu | Ser | Leu | Asp 560 | Thr | His | Cys | His | Leu 565 | His | Tyr | Glu | Val | Leu 570 |
| Leu | Ala | Gly | Leu | Gly 575 | Gly | Ser | Glu | Gln | Gly 580 | Thr | Val | Thr | Ala | His 585 |
| Leu | Leu | Gly | Pro | Pro 590 | Gly | Thr | Pro | Gly | Pro 595 | Arg | Arg | Leu | Leu | Lys 600 |
| Gly | Phe | Tyr | Gly | Ser 605 | Glu | Ala | Gln | Gly | Val 610 | Val | Lys | Asp | Leu | Glu 615 |
| Pro | Glu | Leu | Leu | Arg 620 | His | Leu | Ala | Lys | Gly 625 | Met | Ala | Ser | Leu | Met 630 |
| Ile | Thr | Thr | Lys | Gly 635 | Ser | Pro | Arg | Gly | Glu 640 | Leu | Arg | Gly | Gln | Val 645 |
| His | Ile | Ala | Asn | Gln 650 | Cys | Glu | Val | Gly | Gly 655 | Leu | Arg | Leu | Glu | Ala 660 |

| | | | |
|---|-----|-----|-----|
| Ala Gly Ala Glu Gly Val Arg Ala Leu Gly Ala Pro Asp Thr Ala | 665 | 670 | 675 |
| Ser Ala Ala Pro Pro Val Val Pro Gly Leu Pro Ala Leu Ala Pro | 680 | 685 | 690 |
| Ala Lys Pro Gly Gly Pro Gly Arg Pro Arg Asp Pro Asn Thr Cys | 695 | 700 | 705 |
| Phe Phe Glu Gly Gln Gln Arg Pro His Gly Ala Arg Trp Ala Pro | 710 | 715 | 720 |
| Asn Tyr Asp Pro Leu Cys Ser Leu Cys Thr Cys Gln Arg Arg Thr | 725 | 730 | 735 |
| Val Ile Cys Asp Pro Val Val Cys Pro Pro Pro Ser Cys Pro His | 740 | 745 | 750 |
| Pro Val Gln Ala Pro Asp Gln Cys Cys Pro Val Cys Pro Glu Lys | 755 | 760 | 765 |
| Gln Asp Val Arg Asp Leu Pro Gly Leu Pro Arg Ser Arg Asp Pro | 770 | 775 | 780 |
| Gly Glu Gly Cys Tyr Phe Asp Gly Asp Arg Ser Trp Arg Ala Ala | 785 | 790 | 795 |
| Gly Thr Arg Trp His Pro Val Val Pro Pro Phe Gly Leu Ile Lys | 800 | 805 | 810 |
| Cys Ala Val Cys Thr Cys Lys Gly Gly Thr Gly Glu Val His Cys | 815 | 820 | 825 |
| Glu Lys Val Gln Cys Pro Arg Leu Ala Cys Ala Gln Pro Val Arg | 830 | 835 | 840 |
| Val Asn Pro Thr Asp Cys Cys Lys Gln Cys Pro Val Gly Ser Gly | 845 | 850 | 855 |
| Ala His Pro Gln Leu Gly Asp Pro Met Gln Ala Asp Gly Pro Arg | 860 | 865 | 870 |
| Gly Cys Arg Phe Ala Gly Gln Trp Phe Pro Glu Ser Gln Ser Trp | 875 | 880 | 885 |
| His Pro Ser Val Pro Pro Phe Gly Glu Met Ser Cys Ile Thr Cys | 890 | 895 | 900 |
| Arg Cys Gly Ala Gly Val Pro His Cys Glu Arg Asp Asp Cys Ser | 905 | 910 | 915 |
| Leu Pro Leu Ser Cys Gly Ser Gly Lys Glu Ser Arg Cys Cys Ser | 920 | 925 | 930 |
| Arg Cys Thr Ala His Arg Arg Pro Pro Glu Thr Arg Thr Asp Pro | 935 | 940 | 945 |
| Glu Leu Glu Lys Glu Ala Glu Gly Ser | | | |

<210> 8
 <211> 44
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic Oligonucleotide probe

 <400> 8
 gactagttct agatcgcgag cggccgccct tttttttttt tttt 44

 <210> 9
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 9
 cggacgcgtg gggcctgcgc acccagct 28

 <210> 10
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 10
 gccgctcccc gaacgggcag cggctccttc tcagaa 36

 <210> 11
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 11
 ggcgcacagc acgcagcgca tcaccccgaa tggctc 36

 <210> 12
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic Oligonucleotide Probe

 <400> 12
 gtgctgccca tccgttctga gaagga 26

 <210> 13

caaatgactt ggagtgttca ggaaaaggaa aatgcaccac gaagccgtca 1100
 gaggcaactt tttcctgtac ctgtgaggag cagtacgtgg gtactttctg 1150
 tgaagaatac gatgcttgcc agaggaaacc ttgccaaaac aacgcgagct 1200
 gtattgatgc aaatgaaaag caagatggga gcaatttcac ctgtgtttgc 1250
 cttcctgggt atactggaga gctttgccag tccaagattg attactgcat 1300
 cctagacca tgcagaaatg gagcaacatg catttccagt ctcagtggat 1350
 tcacctgcca gtgtccagaa ggatacttcg gatctgcttg tgaagaaaag 1400
 gtggacccct gcgcctcgtc tccgtgccag aacaacggca cctgctatgt 1450
 ggacggggta cactttacct gcaactgcag cccgggcttc acagggccga 1500
 cctgtgecca gcttattgac ttctgtgccc tcagcccctg tgctcatggc 1550
 acgtgccgca gcgtgggcac cagctacaaa tgectctgtg atccaggtta 1600
 ccattggctc tactgtgagg aggaatataa tgagtgcctc tccgtccat 1650
 gectgaatgc agccacctgc agggacctcg ttaatggcta tgagtgtgtg 1700
 tgctggcag aatacaaagg aacacactgt gaattgtaca aggatccctg 1750
 cgctaacgtc agctgtctga acggagccac ctgtgacagc gacggcctga 1800
 atggcacgtg catctgtgca cccgggttta cagggaaga gtgcgacatt 1850
 gacataaatg aatgtgacag taaccctgc caccatgggt ggagctgcct 1900
 ggaccagccc aatgggtata actgccactg cccgcatggg tgggtgggag 1950
 caaactgtga gatccacctc caatggaagt cccggcacat ggcggagagc 2000
 ctaccaaca tgccacggca ctccctctac atcatcattg gagccctctg 2050
 cgtggccttc atccttatgc tgatcatcct gatcgtgggg atttgccgca 2100
 tcagccgcat tgaataccag ggttcttcca ggccagccta tgaggagttc 2150
 tacaactgcc gcagcatcga cagcgagttc agcaatgcc a ttgcatccat 2200
 cccgcatgcc aggtttggaa agaaatcccg gcctgcaatg tatgatgtga 2250
 gccccatcgc ctatgaagat tacagtctctg atgacaaacc cttggtcaca 2300
 ctgattaaaa ctaaagattt gtaatctttt tttggattat ttttcaaaaa 2350
 gatgagatac tacactcatt taaatatttt taagaaaata aaaagcttaa 2400
 gaaatttaaa atgctagctg ctcaagagtt ttcagtagaa tatttaagaa 2450
 ctaattttct gcagctttta gtttggaaaa aatattttta aaacaaaatt 2500

tgtgaaacct atagacgatg ttttaatgta ctttcagctc tctaaactgt 2550
 gtgcttctac tagtgtgtgc tcttttcaact gtagacacta tcacgagacc 2600
 cagattaatt tctgtgggtg ttacagaata agtctaataca aggagaagtt 2650
 tctgtttgac gtttgagtgc cggctttctg agtagagtta ggaaaaccac 2700
 gtaacgtagc atatgatgta taatagagta taccggttac ttaaaaagaa 2750
 gtctgaaatg ttcgttttgt ggaaaagaaa ctagttaaat ttactattcc 2800
 taaccogaat gaaattagcc tttgccttat tctgtgcatg ggtaagtaac 2850
 ttattttctgc actgttttgt tgaactttgt ggaaacattc tttcgagttt 2900
 gtttttgtca ttttctgaac agtcgtcgaa ctaggcctca aaaacatacg 2950
 taacgaaaag goctagcgag gcaaattctg attgatttga atctatattt 3000
 ttcttttaaaa agtcaagggg tctatattgt gagtaaatta aatttacatt 3050
 tgagttgttt gttgctaaga ggtagtaaata gtaagagagt actggttcct 3100
 tcagtagtga gtattttctca tagtgcagct ttatttatct ccaggatgtt 3150
 tttgtggctg tatttgattg atatgtgctt cttctgattc ttgctaattt 3200
 ccaaccatat tgaataaatg tgatcaagtc a 3231

<210> 15
 <211> 737
 <212> PRT
 <213> Homo Sapien

<400> 15
 Met Gln Pro Arg Arg Ala Gln Ala Pro Gly Ala Gln Leu Leu Pro
 1 5 10 15
 Ala Leu Ala Leu Leu Leu Leu Leu Gly Ala Gly Pro Arg Gly
 20 25 30
 Ser Ser Leu Ala Asn Pro Val Pro Ala Ala Pro Leu Ser Ala Pro
 35 40 45
 Gly Pro Cys Ala Ala Gln Pro Cys Arg Asn Gly Gly Val Cys Thr
 50 55 60
 Ser Arg Pro Glu Pro Asp Pro Gln His Pro Ala Pro Ala Gly Glu
 65 70 75
 Pro Gly Tyr Ser Cys Thr Cys Pro Ala Gly Ile Ser Gly Ala Asn
 80 85 90
 Cys Gln Leu Val Ala Asp Pro Cys Ala Ser Asn Pro Cys His His
 95 100 105
 Gly Asn Cys Ser Ser Ser Ser Ser Ser Ser Asp Gly Tyr Leu

| | | |
|-------------------------------------|-------------------------|-----|
| 110 | 115 | 120 |
| Cys Ile Cys Asn Glu Gly Tyr Glu Gly | Pro Asn Cys Glu Gln Ala | |
| 125 | 130 | 135 |
| Leu Pro Ser Leu Pro Ala Thr Gly Trp | Thr Glu Ser Met Ala Pro | |
| 140 | 145 | 150 |
| Arg Gln Leu Gln Pro Val Pro Ala Thr | Gln Glu Pro Asp Lys Ile | |
| 155 | 160 | 165 |
| Leu Pro Arg Ser Gln Ala Thr Val Thr | Leu Pro Thr Trp Gln Pro | |
| 170 | 175 | 180 |
| Lys Thr Gly Gln Lys Val Val Glu Met | Lys Trp Asp Gln Val Glu | |
| 185 | 190 | 195 |
| Val Ile Pro Asp Ile Ala Cys Gly Asn | Ala Ser Ser Asn Ser Ser | |
| 200 | 205 | 210 |
| Ala Gly Gly Arg Leu Val Ser Phe Glu | Val Pro Gln Asn Thr Ser | |
| 215 | 220 | 225 |
| Val Lys Ile Arg Gln Asp Ala Thr Ala | Ser Leu Ile Leu Leu Trp | |
| 230 | 235 | 240 |
| Lys Val Thr Ala Thr Gly Phe Gln Gln | Cys Ser Leu Ile Asp Gly | |
| 245 | 250 | 255 |
| Arg Ser Val Thr Pro Leu Gln Ala Ser | Gly Gly Leu Val Leu Leu | |
| 260 | 265 | 270 |
| Glu Glu Met Leu Ala Leu Gly Asn Asn | His Phe Ile Gly Phe Val | |
| 275 | 280 | 285 |
| Asn Asp Ser Val Thr Lys Ser Ile Val | Ala Leu Arg Leu Thr Leu | |
| 290 | 295 | 300 |
| Val Val Lys Val Ser Thr Cys Val Pro | Gly Glu Ser His Ala Asn | |
| 305 | 310 | 315 |
| Asp Leu Glu Cys Ser Gly Lys Gly Lys | Cys Thr Thr Lys Pro Ser | |
| 320 | 325 | 330 |
| Glu Ala Thr Phe Ser Cys Thr Cys Glu | Glu Gln Tyr Val Gly Thr | |
| 335 | 340 | 345 |
| Phe Cys Glu Glu Tyr Asp Ala Cys Gln | Arg Lys Pro Cys Gln Asn | |
| 350 | 355 | 360 |
| Asn Ala Ser Cys Ile Asp Ala Asn Glu | Lys Gln Asp Gly Ser Asn | |
| 365 | 370 | 375 |
| Phe Thr Cys Val Cys Leu Pro Gly Tyr | Thr Gly Glu Leu Cys Gln | |
| 380 | 385 | 390 |
| Ser Lys Ile Asp Tyr Cys Ile Leu Asp | Pro Cys Arg Asn Gly Ala | |
| 395 | 400 | 405 |

| | | | | | |
|-----------------|---------------------|-------------------------|-----|-----|-----|
| Thr Cys Ile Ser | Ser Leu Ser Gly Phe | Thr Cys Gln Cys Pro Glu | 410 | 415 | 420 |
| Gly Tyr Phe Gly | Ser Ala Cys Glu Glu | Lys Val Asp Pro Cys Ala | 425 | 430 | 435 |
| Ser Ser Pro Cys | Gln Asn Asn Gly Thr | Cys Tyr Val Asp Gly Val | 440 | 445 | 450 |
| His Phe Thr Cys | Asn Cys Ser Pro Gly | Phe Thr Gly Pro Thr Cys | 455 | 460 | 465 |
| Ala Gln Leu Ile | Asp Phe Cys Ala Leu | Ser Pro Cys Ala His Gly | 470 | 475 | 480 |
| Thr Cys Arg Ser | Val Gly Thr Ser Tyr | Lys Cys Leu Cys Asp Pro | 485 | 490 | 495 |
| Gly Tyr His Gly | Leu Tyr Cys Glu Glu | Glu Tyr Asn Glu Cys Leu | 500 | 505 | 510 |
| Ser Ala Pro Cys | Leu Asn Ala Ala Thr | Cys Arg Asp Leu Val Asn | 515 | 520 | 525 |
| Gly Tyr Glu Cys | Val Cys Leu Ala Glu | Tyr Lys Gly Thr His Cys | 530 | 535 | 540 |
| Glu Leu Tyr Lys | Asp Pro Cys Ala Asn | Val Ser Cys Leu Asn Gly | 545 | 550 | 555 |
| Ala Thr Cys Asp | Ser Asp Gly Leu Asn | Gly Thr Cys Ile Cys Ala | 560 | 565 | 570 |
| Pro Gly Phe Thr | Gly Glu Glu Cys Asp | Ile Asp Ile Asn Glu Cys | 575 | 580 | 585 |
| Asp Ser Asn Pro | Cys His His Gly Gly | Ser Cys Leu Asp Gln Pro | 590 | 595 | 600 |
| Asn Gly Tyr Asn | Cys His Cys Pro His | Gly Trp Val Gly Ala Asn | 605 | 610 | 615 |
| Cys Glu Ile His | Leu Gln Trp Lys Ser | Gly His Met Ala Glu Ser | 620 | 625 | 630 |
| Leu Thr Asn Met | Pro Arg His Ser Leu | Tyr Ile Ile Ile Gly Ala | 635 | 640 | 645 |
| Leu Cys Val Ala | Phe Ile Leu Met Leu | Ile Ile Leu Ile Val Gly | 650 | 655 | 660 |
| Ile Cys Arg Ile | Ser Arg Ile Glu Tyr | Gln Gly Ser Ser Arg Pro | 665 | 670 | 675 |
| Ala Tyr Glu Glu | Phe Tyr Asn Cys Arg | Ser Ile Asp Ser Glu Phe | 680 | 685 | 690 |
| Ser Asn Ala Ile | Ala Ser Ile Arg His | Ala Arg Phe Gly Lys Lys | | | |

| | | |
|---|-----|-----|
| 695 | 700 | 705 |
| Ser Arg Pro Ala Met Tyr Asp Val Ser Pro Ile Ala Tyr Glu Asp | | |
| 710 | 715 | 720 |
| Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr Leu Ile Lys Thr Lys | | |
| 725 | 730 | 735 |

Asp Leu

<210> 16
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 16
 tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 17
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 17
 caggaaacag ctatgaccac ctgcacacct gcaaatecat t 41

<210> 18
 <211> 508
 <212> DNA
 <213> Homo Sapien

<400> 18
 ctctggaagg tcacggccac aggattccaa cagtgtctcc tcatagatgg 50
 acgaaagtgt gacccccctt tcaggctttc aggggggactg gtccctctgg 100
 aggagatgct cgccttgagg aataatcact ttattgggtt tgtgaatgat 150
 tctgtgacta agtctattgt ggctttgcgc ttaactctgg tggatgaagg 200
 cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagggttcag 250
 gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttctgtacc 300
 tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
 gaggaacact tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
 aagatgggag caatttcacc tgtgtttgcc ttctgggtta tactggagag 450
 ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 19
<211> 508
<212> DNA
<213> Homo Sapien

<400> 19
ctctggaagg tcacggccac aggattccaa cagtgcctcc tcatagatgg 50
acgaaagtgt gacccccctt tcaggctttc aggggggactg gtctctctgg 100
aggagatgct cgccttgggg aataatcact ttattgggtt tgtgaatgat 150
tctgtgacta agtctattgt ggctttgcgc ttaactctgg tggagaaggt 200
cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcag 250
gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttctgtacc 300
tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
aagatgggag caatttcacc tgtgtttgcc ttctgggtta tactggagag 450
ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 20
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 20
ctctggaagg tcacggccac agg 23

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 21
ctcagttcgg ttggcaaagc tctc 24

<210> 22
<211> 69
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 22

cagtgtctccc tcatagatgg acgaaagtgt gacccccctt tcaggcgaga 50

gctttgccaa ccgaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

<400> 23

gttgagtctg ctgctcctgc tgetgtgtgt ccagcctgta acctgtgcct 50

acaccacgcc agggcccccc agagccctca ccacgtctgg cgccccaga 100

gcccacacca tgccggggcac ctacgtctcc tcgaccacac tcagtagtcc 150

cagcaccacag ggcttgcaag agcaggcacg ggccctgatg cgggacttcc 200

cgctcgtgga cggccacaac gacctgcccc tggctctaag gcaggtttac 250

cagaaagggc tacaggatgt taacctgcgc aatttcagct acggccagac 300

cagcctggac aggcttagag atggcctcgt gggcgcccag ttctggtcag 350

cctatgtgcc atgccagacc caggaccggg atgccctgcg cctcaccctg 400

gagcagattg acctcatacg ccgcatgtgt gcctcctatt ctgagctgga 450

gcttgtgacc tcggctaaag ctctgaacga cactcagaaa ttggcctgcc 500

tcacgggtgt agaggggtgg cactcgctgg acaatagcct ctccatctta 550

cgtaccttct acatgctggg agtgcgctac ctgacgtca cccacacctg 600

caacacaccc tgggcagaga gctccgctaa gggcgccac tccttctaca 650

acaacatcag cgggctgact gactttggtg agaagggtgg ggagaaatg 700

aaccgcctgg gcatgatggg agacttatcc catgtctcag atgctgtggc 750

acggcgggcc ctggaagtgt cacaggcacc tgtgatcttc tccactcgg 800

ctgcccgggg tgtgtgcaac agtgctcgga atgttctga tgacatcctg 850

cagcttctga agaagaacgg tggcgtcgtg atggtgtctt tgtccatggg 900

agtaatacag tgcaacctat cagccaatgt gtccactgtg gcagatcact 950

tcgaccacat caaggctgtc attggatcca agttcatcgg gattggtgga 1000

gattatgatg gggccggcaa attccctcag gggctggaag acgtgtccac 1050

ataccgggtc ctgatagagg agttgctgag tcgtggctgg agtgaggaag 1100

agcttcaggg tgtccttcgt ggaaacctgc tgcgggtctt cagacaagtg 1150

| Variable | Mean | SD | Min | Max |
|----------------------|-------------|------|-----|-----|
| Age | 34.5 | 10.2 | 21 | 55 |
| Gender | Male | | | |
| Marital status | Married | | | |
| Education | High school | | | |
| Occupation | Teacher | | | |
| Income | Low | | | |
| Health status | Good | | | |
| Stress level | High | | | |
| Life satisfaction | Low | | | |
| Depression | High | | | |
| Loneliness | High | | | |
| Self-esteem | Low | | | |
| Resilience | Low | | | |
| Optimism | Low | | | |
| Gratitude | Low | | | |
| Forgiveness | Low | | | |
| Empathy | Low | | | |
| Prosocial behavior | Low | | | |
| Aggression | High | | | |
| Conduct problems | High | | | |
| Academic achievement | Low | | | |
| School attendance | Low | | | |
| Teacher ratings | Low | | | |
| Parent ratings | Low | | | |
| Peer ratings | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
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| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| Peer reports | Low | | | |
| Self-reports | Low | | | |
| Teacher reports | Low | | | |
| Parent reports | Low | | | |
| | | | | |

<211> 433

<213> Home

Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu Ser Ser Pro Ser
1 5 10 15

Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe
20 25 30

Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln
35 40 45

Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser
50 55 60

Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly
65 70 75

Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg
80 85 90

Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg
95 100 105

Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys
110 115 120

Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu
125 130 135

Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe
140 145 150

Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn
155 160 165

Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr
170 175 180

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Asn | Ile | Ser | Gly | Leu | Thr | Asp | Phe | Gly | Glu | Lys | Val | Val | Ala |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Glu | Met | Asn | Arg | Leu | Gly | Met | Met | Val | Asp | Leu | Ser | His | Val | Ser |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Asp | Ala | Val | Ala | Arg | Arg | Ala | Leu | Glu | Val | Ser | Gln | Ala | Pro | Val |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Ile | Phe | Ser | His | Ser | Ala | Ala | Arg | Gly | Val | Cys | Asn | Ser | Ala | Arg |
| | | | | 230 | | | | | 235 | | | | | 240 |
| Asn | Val | Pro | Asp | Asp | Ile | Leu | Gln | Leu | Leu | Lys | Lys | Asn | Gly | Gly |
| | | | | 245 | | | | | 250 | | | | | 255 |
| Val | Val | Met | Val | Ser | Leu | Ser | Met | Gly | Val | Ile | Gln | Cys | Asn | Pro |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Ser | Ala | Asn | Val | Ser | Thr | Val | Ala | Asp | His | Phe | Asp | His | Ile | Lys |
| | | | | 275 | | | | | 280 | | | | | 285 |
| Ala | Val | Ile | Gly | Ser | Lys | Phe | Ile | Gly | Ile | Gly | Gly | Asp | Tyr | Asp |
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| Gly | Ala | Gly | Lys | Phe | Pro | Gln | Gly | Leu | Glu | Asp | Val | Ser | Thr | Tyr |
| | | | | 305 | | | | | 310 | | | | | 315 |
| Pro | Val | Leu | Ile | Glu | Glu | Leu | Leu | Ser | Arg | Gly | Trp | Ser | Glu | Glu |
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| Glu | Leu | Gln | Gly | Val | Leu | Arg | Gly | Asn | Leu | Leu | Arg | Val | Phe | Arg |
| | | | | 335 | | | | | 340 | | | | | 345 |
| Gln | Val | Glu | Lys | Val | Gln | Glu | Glu | Asn | Lys | Trp | Gln | Ser | Pro | Leu |
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| Glu | Asp | Lys | Phe | Pro | Asp | Glu | Gln | Leu | Ser | Ser | Ser | Cys | His | Ser |
| | | | | 365 | | | | | 370 | | | | | 375 |
| Asp | Leu | Ser | Arg | Leu | Arg | Gln | Arg | Gln | Ser | Leu | Thr | Ser | Gly | Gln |
| | | | | 380 | | | | | 385 | | | | | 390 |
| Glu | Leu | Thr | Glu | Ile | Pro | Ile | His | Trp | Thr | Ala | Lys | Leu | Pro | Ala |
| | | | | 395 | | | | | 400 | | | | | 405 |
| Lys | Trp | Ser | Val | Ser | Glu | Ser | Ser | Pro | His | Met | Ala | Pro | Val | Leu |
| | | | | 410 | | | | | 415 | | | | | 420 |
| Ala | Val | Val | Ala | Thr | Phe | Pro | Val | Leu | Ile | Leu | Trp | Leu | | |
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<212> PRT

<213> Homo Sapien

<400> 30

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| Met | Pro | Gly | Thr | Tyr | Ala | Pro | Ser | Thr | Thr | Leu | Ser | Ser | Pro | Ser |
| 1 | | | | 5 | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gln | Gly | Leu | Gln | Glu | Gln | Ala | Arg | Ala | Leu | Met | Arg | Asp | Phe |
| | | | 20 | | | | | 25 | | | | | 30 | |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Leu | Val | Asp | Gly | His | Asn | Asp | Leu | Pro | Leu | Val | Leu | Arg | Gln |
| | | | 35 | | | | | 40 | | | | | 45 | |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Tyr | Gln | Lys | Gly | Leu | Gln | Asp | Val | Asn | Leu | Arg | Asn | Phe | Ser |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|
| | | | | 50 | | | | | 55 | | | | | 60 |
| Tyr | Gly | Gln | Thr | Ser 65 | Leu | Asp | Arg | Leu | Arg 70 | Asp | Gly | Leu | Val | Gly 75 |
| Ala | Gln | Phe | Trp | Ser 80 | Ala | Tyr | Val | Pro | Cys 85 | Gln | Thr | Gln | Asp | Arg 90 |
| Asp | Ala | Leu | Arg | Leu 95 | Thr | Leu | Glu | Gln | Ile 100 | Asp | Leu | Ile | Arg | Arg 105 |
| Met | Cys | Ala | Ser | Tyr 110 | Ser | Glu | Leu | Glu | Leu 115 | Val | Thr | Ser | Ala | Lys 120 |
| Ala | Leu | Asn | Asp | Thr 125 | Gln | Lys | Leu | Ala | Cys 130 | Leu | Ile | Gly | Val | Glu 135 |
| Gly | Gly | His | Ser | Leu 140 | Asp | Asn | Ser | Leu | Ser 145 | Ile | Leu | Arg | Thr | Phe 150 |
| Tyr | Met | Leu | Gly | Val 155 | Arg | Tyr | Leu | Thr | Leu 160 | Thr | His | Thr | Cys | Asn 165 |
| Thr | Pro | Trp | Ala | Glu 170 | Ser | Ser | Ala | Lys | Gly 175 | Val | His | Ser | Phe | Tyr 180 |
| Asn | Asn | Ile | Ser | Gly 185 | Leu | Thr | Asp | Phe | Gly 190 | Glu | Lys | Val | Val | Ala 195 |
| Glu | Met | Asn | Arg | Leu 200 | Gly | Met | Met | Val | Asp 205 | Leu | Ser | His | Val | Ser 210 |
| Asp | Ala | Val | Ala | Arg 215 | Arg | Ala | Leu | Glu | Val 220 | Ser | Gln | Ala | Pro | Val 225 |
| Ile | Phe | Ser | His | Ser 230 | Ala | Ala | Arg | Gly | Val 235 | Cys | Asn | Ser | Ala | Arg 240 |
| Asn | Val | Pro | Asp | Asp 245 | Ile | Leu | Gln | Leu | Leu 250 | Lys | Lys | Asn | Gly | Gly 255 |
| Val | Val | Met | Val | Ser 260 | Leu | Ser | Met | Gly | Val 265 | Ile | Gln | Cys | Asn | Pro 270 |
| Ser | Ala | Asn | Val | Ser 275 | Thr | Val | Ala | Asp | His 280 | Phe | Asp | His | Ile | Lys 285 |
| Ala | Val | Ile | Gly | Ser 290 | Lys | Phe | Ile | Gly | Ile 295 | Gly | Gly | Asp | Tyr | Asp 300 |
| Gly | Ala | Gly | Lys | Phe 305 | Pro | Gln | Gly | Leu | Glu 310 | Asp | Val | Ser | Thr | Tyr 315 |
| Pro | Val | Leu | Ile | Glu 320 | Glu | Leu | Leu | Ser | Arg 325 | Gly | Trp | Ser | Glu | Glu 330 |
| Glu | Leu | Gln | Gly | Val 335 | Leu | Arg | Gly | Asn | Leu 340 | Leu | Arg | Val | Phe | Arg 345 |

| Variable | Mean | SD | Min | Max |
|---------------------|-------|------|-----|-----|
| Age | 34.2 | 10.5 | 18 | 65 |
| Gender | 50.0 | 50.0 | 0 | 100 |
| Marital status | 65.0 | 48.0 | 0 | 100 |
| Education | 12.5 | 2.5 | 8 | 16 |
| Income | 35.0 | 15.0 | 10 | 60 |
| Occupation | 25.0 | 20.0 | 0 | 100 |
| Health status | 75.0 | 25.0 | 0 | 100 |
| Stress level | 45.0 | 15.0 | 0 | 100 |
| Life satisfaction | 60.0 | 20.0 | 0 | 100 |
| Resilience | 55.0 | 18.0 | 0 | 100 |
| Optimism | 65.0 | 22.0 | 0 | 100 |
| Self-efficacy | 70.0 | 25.0 | 0 | 100 |
| Emotional stability | 60.0 | 20.0 | 0 | 100 |
| Empathy | 55.0 | 18.0 | 0 | 100 |
| Prosocial behavior | 65.0 | 22.0 | 0 | 100 |
| Aggression | 30.0 | 12.0 | 0 | 100 |
| Conformity | 50.0 | 15.0 | 0 | 100 |
| Autonomy | 40.0 | 10.0 | 0 | 100 |
| Openness | 55.0 | 18.0 | 0 | 100 |
| Conscientiousness | 60.0 | 20.0 | 0 | 100 |
| Neuroticism | 35.0 | 15.0 | 0 | 100 |
| Extraversion | 50.0 | 15.0 | 0 | 100 |
| Agreeableness | 60.0 | 20.0 | 0 | 100 |
| Conscientiousness | 65.0 | 22.0 | 0 | 100 |
| Neuroticism | 30.0 | 12.0 | 0 | 100 |
| Extraversion | 55.0 | 18.0 | 0 | 100 |
| Agreeableness | 65.0 | 22.0 | 0 | 100 |
| Conscientiousness | 70.0 | 25.0 | 0 | 100 |
| Neuroticism | 25.0 | 10.0 | 0 | 100 |
| Extraversion | 60.0 | 20.0 | 0 | 100 |
| Agreeableness | 70.0 | 25.0 | 0 | 100 |
| Conscientiousness | 75.0 | 28.0 | 0 | 100 |
| Neuroticism | 20.0 | 8.0 | 0 | 100 |
| Extraversion | 65.0 | 22.0 | 0 | 100 |
| Agreeableness | 75.0 | 28.0 | 0 | 100 |
| Conscientiousness | 80.0 | 30.0 | 0 | 100 |
| Neuroticism | 15.0 | 5.0 | 0 | 100 |
| Extraversion | 70.0 | 25.0 | 0 | 100 |
| Agreeableness | 80.0 | 30.0 | 0 | 100 |
| Conscientiousness | 85.0 | 32.0 | 0 | 100 |
| Neuroticism | 10.0 | 3.0 | 0 | 100 |
| Extraversion | 75.0 | 28.0 | 0 | 100 |
| Agreeableness | 85.0 | 32.0 | 0 | 100 |
| Conscientiousness | 90.0 | 35.0 | 0 | 100 |
| Neuroticism | 5.0 | 1.0 | 0 | 100 |
| Extraversion | 80.0 | 30.0 | 0 | 100 |
| Agreeableness | 90.0 | 35.0 | 0 | 100 |
| Conscientiousness | 95.0 | 38.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 85.0 | 32.0 | 0 | 100 |
| Agreeableness | 95.0 | 38.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 90.0 | 35.0 | 0 | 100 |
| Agreeableness | 100.0 | 40.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 95.0 | 38.0 | 0 | 100 |
| Agreeableness | 100.0 | 40.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 100.0 | 40.0 | 0 | 100 |
| Agreeableness | 100.0 | 40.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 100.0 | 40.0 | 0 | 100 |
| Agreeableness | 100.0 | 40.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 100.0 | 40.0 | 0 | 100 |
| Agreeableness | 100.0 | 40.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |
| Extraversion | 100.0 | 40.0 | 0 | 100 |
| Agreeableness | 100.0 | 40.0 | 0 | 100 |
| Conscientiousness | 100.0 | 40.0 | 0 | 100 |
| Neuroticism | 0.0 | 0.0 | 0 | 100 |

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atggccagga caacacatgt gaggagtacc acacagtggg gccccactcc 700
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ggaggccacc aaccgcctgg gctctgccgc ctccgatgta ctacgctgg 800

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| | | | | | |
|---------------------|-----------------|-------------------------|-----|-----|-----|
| Ser Val His Gly Asp | Pro Pro Gly Ala | Thr Ala Glu Gly Leu Tyr | 65 | 70 | 75 |
| Trp Thr Leu Asn Gly | Arg Arg Leu Pro | Pro Glu Leu Ser Arg Val | 80 | 85 | 90 |
| Leu Asn Ala Ser Thr | Leu Ala Leu Ala | Leu Ala Asn Leu Asn Gly | 95 | 100 | 105 |
| Ser Arg Gln Arg Ser | Gly Asp Asn Leu | Val Cys His Ala Arg Asp | 110 | 115 | 120 |
| Gly Ser Ile Leu Ala | Gly Ser Cys Leu | Tyr Val Gly Leu Pro Pro | 125 | 130 | 135 |
| Glu Lys Pro Val Asn | Ile Ser Cys Trp | Ser Lys Asn Met Lys Asp | 140 | 145 | 150 |
| Leu Thr Cys Arg Trp | Thr Pro Gly Ala | His Gly Glu Thr Phe Leu | 155 | 160 | 165 |
| His Thr Asn Tyr Ser | Leu Lys Tyr Lys | Leu Arg Trp Tyr Gly Gln | 170 | 175 | 180 |
| Asp Asn Thr Cys Glu | Glu Tyr His Thr | Val Gly Pro His Ser Cys | 185 | 190 | 195 |
| His Ile Pro Lys Asp | Leu Ala Leu Phe | Thr Pro Tyr Glu Ile Trp | 200 | 205 | 210 |
| Val Glu Ala Thr Asn | Arg Leu Gly Ser | Ala Arg Ser Asp Val Leu | 215 | 220 | 225 |
| Thr Leu Asp Ile Leu | Asp Val Val Thr | Thr Asp Pro Pro Pro Asp | 230 | 235 | 240 |
| Val His Val Ser Arg | Val Gly Gly Leu | Glu Asp Gln Leu Ser Val | 245 | 250 | 255 |
| Arg Trp Val Ser Pro | Pro Ala Leu Lys | Asp Phe Leu Phe Gln Ala | 260 | 265 | 270 |
| Lys Tyr Gln Ile Arg | Tyr Arg Val Glu | Asp Ser Val Asp Trp Lys | 275 | 280 | 285 |
| Val Val Asp Asp Val | Ser Asn Gln Thr | Ser Cys Arg Leu Ala Gly | 290 | 295 | 300 |
| Leu Lys Pro Gly Thr | Val Tyr Phe Val | Gln Val Arg Cys Asn Pro | 305 | 310 | 315 |
| Phe Gly Ile Tyr Gly | Ser Lys Lys Ala | Gly Ile Trp Ser Glu Trp | 320 | 325 | 330 |
| Ser His Pro Thr Ala | Ala Ser Thr Pro | Arg Ser Glu Arg Pro Gly | 335 | 340 | 345 |
| Pro Gly Gly Gly Ala | Cys Glu Pro Arg | Gly Gly Glu Pro Ser Ser | | | |

[illegible]

30

| | | | | | |
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| tcaccggcga | aatcgtgctg | attacaggag | ctgggcattg | aattgggaga | 250 |
| ctgactgcct | atgaatttgc | taaacttaaa | agcaagctgg | ttctctggga | 300 |
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| tacagctctg | caaagaaggt | gaaggcagaa | attggagatg | ttagtatttt | 450 |
| agtaaataat | gctggtgtag | tctatacatc | agatttgttt | gctacacaag | 500 |
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| ctgactgagc | agaagatgat | ttttattcca | tcttctatag | cttttttaac | 900 |
| aacattggaa | aggatccttc | ctgagcgttt | cctggcagtt | ttaaaacgaa | 950 |
| aatcagtgt | taagtttgat | gcagttattg | gatataaaat | gaaagcgcaa | 1000 |
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| tcctaattag | ccagaatttt | aatgtttgaa | cttctgtttt | ttctaattat | 1100 |
| ccccatttct | tcaatatcat | ttttgaggct | ttggcagctc | tcatttacta | 1150 |
| ccacttgttc | tttagccaaa | agctgattac | atatgatata | aacagagaaa | 1200 |
| tacctttaga | ggtgacttta | aggaaaatga | agaaaaagaa | ccaaaatgac | 1250 |
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| aaaatttgta | ccataaccgt | ttatttaaca | tatatTTTTT | tttttgattg | 1350 |
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| agaaacttca | agctctctaa | ataaaatgaa | ggactatata | tagtggtatt | 1450 |
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[illegible]

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<213> Homo Sapien

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Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
35 40 45

His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
50 55 60

Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
65 70 75

Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
80 85 90

Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
95 100 105

Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
110 115 120

Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
125 130 135

Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
140 145 150

Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
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Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
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32


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aaaaaaaaa aaaaaaaaaa aaaaaaa 1377

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<210> 42

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 42

| | | | | | | | | | | | | | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Met | Arg | Pro | Leu | Leu | Val | Leu | Leu | Leu | Leu | Gly | Leu | Ala | Ala | Gly | 1 | 5 | 10 | 15 |
| Ser | Pro | Pro | Leu | Asp | Asp | Asn | Lys | Ile | Pro | Ser | Leu | Cys | Pro | Gly | 20 | 25 | 30 | |
| His | Pro | Gly | Leu | Pro | Gly | Thr | Pro | Gly | His | His | Gly | Ser | Gln | Gly | 35 | 40 | 45 | |
| Leu | Pro | Gly | Arg | Asp | Gly | Arg | Asp | Gly | Arg | Asp | Gly | Ala | Pro | Gly | 50 | 55 | 60 | |
| Ala | Pro | Gly | Glu | Lys | Gly | Glu | Gly | Gly | Arg | Pro | Gly | Leu | Pro | Gly | 65 | 70 | 75 | |
| Pro | Arg | Gly | Asp | Pro | Gly | Pro | Arg | Gly | Glu | Ala | Gly | Pro | Ala | Gly | 80 | 85 | 90 | |
| Pro | Thr | Gly | Pro | Ala | Gly | Glu | Cys | Ser | Val | Pro | Pro | Arg | Ser | Ala | 95 | 100 | 105 | |
| Phe | Ser | Ala | Lys | Arg | Ser | Glu | Ser | Arg | Val | Pro | Pro | Pro | Ser | Asp | 110 | 115 | 120 | |
| Ala | Pro | Leu | Pro | Phe | Asp | Arg | Val | Leu | Val | Asn | Glu | Gln | Gly | His | 125 | 130 | 135 | |
| Tyr | Asp | Ala | Val | Thr | Gly | Lys | Phe | Thr | Cys | Gln | Val | Pro | Gly | Val | 140 | 145 | 150 | |
| Tyr | Tyr | Phe | Ala | Val | His | Ala | Thr | Val | Tyr | Arg | Ala | Ser | Leu | Gln | 155 | 160 | 165 | |
| Phe | Asp | Leu | Val | Lys | Asn | Gly | Glu | Ser | Ile | Ala | Ser | Phe | Phe | Gln | 170 | 175 | 180 | |
| Phe | Phe | Gly | Gly | Trp | Pro | Lys | Pro | Ala | Ser | Leu | Ser | Gly | Gly | Ala | 185 | 190 | 195 | |
| Met | Val | Arg | Leu | Glu | Pro | Glu | Asp | Gln | Val | Trp | Val | Gln | Val | Gly | 200 | 205 | 210 | |
| Val | Gly | Asp | Tyr | Ile | Gly | Ile | Tyr | Ala | Ser | Ile | Lys | Thr | Asp | Ser | 215 | 220 | 225 | |
| Thr | Phe | Ser | Gly | Phe | Leu | Val | Tyr | Ser | Asp | Trp | His | Ser | Ser | Pro | 230 | 235 | 240 | |
| Val Phe Ala | | | | | | | | | | | | | | | | | | |

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<213> Homo Sapien

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<211> 455

<212> PRT

<213> Homo Sapien

<400> 50

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | His | Pro | Glu | Thr | Ser | Pro | Gly | Arg | Gly | His | Leu | Leu | Ala |
| 1 | | | | 5 | | | | 10 | | | | | 15 | |
| Val | Leu | Leu | Ala | Leu | Leu | Gly | Thr | Thr | Trp | Ala | Glu | Val | Trp | Pro |
| | | | | 20 | | | | 25 | | | | | 30 | |
| Pro | Gln | Leu | Gln | Glu | Gln | Ala | Pro | Met | Ala | Gly | Ala | Leu | Asn | Arg |
| | | | | 35 | | | | 40 | | | | | 45 | |
| Lys | Glu | Ser | Phe | Leu | Leu | Leu | Ser | Leu | His | Asn | Arg | Leu | Arg | Ser |
| | | | | 50 | | | | 55 | | | | | 60 | |
| Trp | Val | Gln | Pro | Pro | Ala | Ala | Asp | Met | Arg | Arg | Leu | Asp | Trp | Ser |
| | | | | 65 | | | | 70 | | | | | 75 | |
| Asp | Ser | Leu | Ala | Gln | Leu | Ala | Gln | Ala | Arg | Ala | Ala | Leu | Cys | Gly |
| | | | | 80 | | | | 85 | | | | | 90 | |
| Ile | Pro | Thr | Pro | Ser | Leu | Ala | Ser | Gly | Leu | Trp | Arg | Thr | Leu | Gln |
| | | | | 95 | | | | 100 | | | | | 105 | |
| Val | Gly | Trp | Asn | Met | Gln | Leu | Leu | Pro | Ala | Gly | Leu | Ala | Ser | Phe |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|
| | | | | 110 | | | | | 115 | | | | | 120 |
| Val | Glu | Val | Val | Ser 125 | Leu | Trp | Phe | Ala | Glu 130 | Gly | Gln | Arg | Tyr | Ser 135 |
| His | Ala | Ala | Gly | Glu 140 | Cys | Ala | Arg | Asn | Ala 145 | Thr | Cys | Thr | His | Tyr 150 |
| Thr | Gln | Leu | Val | Trp 155 | Ala | Thr | Ser | Ser | Gln 160 | Leu | Gly | Cys | Gly | Arg 165 |
| His | Leu | Cys | Ser | Ala 170 | Gly | Gln | Thr | Ala | Ile 175 | Glu | Ala | Phe | Val | Cys 180 |
| Ala | Tyr | Ser | Pro | Gly 185 | Gly | Asn | Trp | Glu | Val 190 | Asn | Gly | Lys | Thr | Ile 195 |
| Ile | Pro | Tyr | Lys | Lys 200 | Gly | Ala | Trp | Cys | Ser 205 | Leu | Cys | Thr | Ala | Ser 210 |
| Val | Ser | Gly | Cys | Phe 215 | Lys | Ala | Trp | Asp | His 220 | Ala | Gly | Gly | Leu | Cys 225 |
| Glu | Val | Pro | Arg | Asn 230 | Pro | Cys | Arg | Met | Ser 235 | Cys | Gln | Asn | His | Gly 240 |
| Arg | Leu | Asn | Ile | Ser 245 | Thr | Cys | His | Cys | His 250 | Cys | Pro | Pro | Gly | Tyr 255 |
| Thr | Gly | Arg | Tyr | Cys 260 | Gln | Val | Arg | Cys | Ser 265 | Leu | Gln | Cys | Val | His 270 |
| Gly | Arg | Phe | Arg | Glu 275 | Glu | Glu | Cys | Ser | Cys 280 | Val | Cys | Asp | Ile | Gly 285 |
| Tyr | Gly | Gly | Ala | Gln 290 | Cys | Ala | Thr | Lys | Val 295 | His | Phe | Pro | Phe | His 300 |
| Thr | Cys | Asp | Leu | Arg 305 | Ile | Asp | Gly | Asp | Cys 310 | Phe | Met | Val | Ser | Ser 315 |
| Glu | Ala | Asp | Thr | Tyr 320 | Tyr | Arg | Ala | Arg | Met 325 | Lys | Cys | Gln | Arg | Lys 330 |
| Gly | Gly | Val | Leu | Ala 335 | Gln | Ile | Lys | Ser | Gln 340 | Lys | Val | Gln | Asp | Ile 345 |
| Leu | Ala | Phe | Tyr | Leu 350 | Gly | Arg | Leu | Glu | Thr 355 | Thr | Asn | Glu | Val | Thr 360 |
| Asp | Ser | Asp | Phe | Glu 365 | Thr | Arg | Asn | Phe | Trp 370 | Ile | Gly | Leu | Thr | Tyr 375 |
| Lys | Thr | Ala | Lys | Asp 380 | Ser | Phe | Arg | Trp | Ala 385 | Thr | Gly | Glu | His | Gln 390 |
| Ala | Phe | Thr | Ser | Phe 395 | Ala | Phe | Gly | Gln | Pro 400 | Asp | Asn | His | Gly | Leu 405 |

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| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|
| Arg | Val | Lys | Glu | Lys 125 | Arg | Asn | Lys | Thr | Thr 130 | Glu | Glu | Asn | Gly | Glu 135 |
| Lys | Gly | Thr | Glu | Ile 140 | Phe | Arg | Ala | Ser | Ala 145 | Val | Ile | Pro | Ser | Lys 150 |
| Asp | Lys | Ala | Ala | Phe 155 | Phe | Leu | Ser | Tyr | Glu 160 | Glu | Leu | Leu | Gln | Arg 165 |
| Arg | Leu | Gly | Lys | Tyr 170 | Glu | His | Ser | Ile | Ser 175 | Val | Arg | Pro | Gln | Glu 180 |
| Leu | Ser | Gly | Arg | Leu 185 | Ser | Val | Asp | Val | Asn 190 | Ile | Leu | Glu | Ser | Ala 195 |
| Gly | Ile | Ala | Ser | Leu 200 | Glu | Val | Leu | Pro | Leu 205 | His | Asn | Ser | Arg | Gln 210 |
| Arg | Gly | Ser | Gly | Arg 215 | Gly | Glu | Asp | Asp | Ser 220 | Gly | Pro | Pro | Pro | Ser 225 |
| Thr | Val | Ile | Asn | Gln 230 | Asn | Glu | Thr | Phe | Ala 235 | Asn | Ile | Ile | Phe | Lys 240 |
| Pro | Thr | Val | Val | Gln 245 | Gln | Ala | Arg | Ile | Ala 250 | Gln | Asn | Gly | Ile | Leu 255 |
| Gly | Asp | Phe | Ile | Ile 260 | Arg | Tyr | Asp | Val | Asn 265 | Arg | Glu | Gln | Ser | Ile 270 |
| Gly | Asp | Ile | Gln | Val 275 | Leu | Asn | Gly | Tyr | Phe 280 | Val | His | Tyr | Phe | Ala 285 |
| Pro | Lys | Asp | Leu | Pro 290 | Pro | Leu | Pro | Lys | Asn 295 | Val | Val | Phe | Val | Leu 300 |
| Asp | Ser | Ser | Ala | Ser 305 | Met | Val | Gly | Thr | Lys 310 | Leu | Arg | Gln | Thr | Lys 315 |
| Asp | Ala | Leu | Phe | Thr 320 | Ile | Leu | His | Asp | Leu 325 | Arg | Pro | Gln | Asp | Arg 330 |
| Phe | Ser | Ile | Ile | Gly 335 | Phe | Ser | Asn | Arg | Ile 340 | Lys | Val | Trp | Lys | Asp 345 |
| His | Leu | Ile | Ser | Val 350 | Thr | Pro | Asp | Ser | Ile 355 | Arg | Asp | Gly | Lys | Val 360 |
| Tyr | Ile | His | His | Met 365 | Ser | Pro | Thr | Gly | Gly 370 | Thr | Asp | Ile | Asn | Gly 375 |
| Ala | Leu | Gln | Arg | Ala 380 | Ile | Arg | Leu | Leu | Asn 385 | Lys | Tyr | Val | Ala | His 390 |
| Ser | Gly | Ile | Gly | Asp 395 | Arg | Ser | Val | Ser | Leu 400 | Ile | Val | Phe | Leu | Thr 405 |
| Asp | Gly | Lys | Pro | Thr | Val | Gly | Glu | Thr | His | Thr | Leu | Lys | Ile | Leu |

[illegible]

| Variable | Mean | SD | Min | Max |
|----------------|-------------|------|-----|-----|
| Age | 34.5 | 10.2 | 22 | 55 |
| Gender | Male | 10.1 | 0 | 10 |
| Marital status | Married | 10.1 | 0 | 10 |
| Education | High school | 10.1 | 0 | 10 |
| Occupation | Unemployed | 10.1 | 0 | 10 |
| Income | Low | 10.1 | 0 | 10 |
| Health status | Good | 10.1 | 0 | 10 |
| Family size | Small | 10.1 | 0 | 10 |
| Religion | Islam | 10.1 | 0 | 10 |
| Region | Urban | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | 0 | 10 |
| Season | Spring | 10.1 | 0 | 10 |
| Weather | Sunny | 10.1 | 0 | 10 |
| Time of year | Summer | 10.1 | 0 | 10 |
| Time of month | Summer | 10.1 | 0 | 10 |
| Time of day | Day | 10.1 | | |

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tgctgttgct cttctccgcc gcggcactga tccccacagg tgatgggcag 150
aatctgttta cgaaaqacqt gacaqtgacg gagggaqagg ttqcqaccat 200
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<212> PRT
<213> Homo Sapien

<400> 61
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1 5 10 15

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|
| Ala | Ala | Ala | Ala | Ala 20 | Pro | Pro | Gly | Leu | Arg 25 | Leu | Leu | Leu | Leu | Leu 30 |
| Phe | Ser | Ala | Ala | Ala 35 | Leu | Ile | Pro | Thr | Gly 40 | Asp | Gly | Gln | Asn | Leu 45 |
| Phe | Thr | Lys | Asp | Val 50 | Thr | Val | Ile | Glu | Gly 55 | Glu | Val | Ala | Thr | Ile 60 |
| Ser | Cys | Gln | Val | Asn 65 | Lys | Ser | Asp | Asp | Ser 70 | Val | Ile | Gln | Leu | Leu 75 |
| Asn | Pro | Asn | Arg | Gln 80 | Thr | Ile | Tyr | Phe | Arg 85 | Asp | Phe | Arg | Pro | Leu 90 |
| Lys | Asp | Ser | Arg | Phe 95 | Gln | Leu | Leu | Asn | Phe 100 | Ser | Ser | Ser | Glu | Leu 105 |
| Lys | Val | Ser | Leu | Thr 110 | Asn | Val | Ser | Ile | Ser 115 | Asp | Glu | Gly | Arg | Tyr 120 |
| Phe | Cys | Gln | Leu | Tyr 125 | Thr | Asp | Pro | Pro | Gln 130 | Glu | Ser | Tyr | Thr | Thr 135 |
| Ile | Thr | Val | Leu | Val 140 | Pro | Pro | Arg | Asn | Leu 145 | Met | Ile | Asp | Ile | Gln 150 |
| Lys | Asp | Thr | Ala | Val 155 | Glu | Gly | Glu | Glu | Ile 160 | Glu | Val | Asn | Cys | Thr 165 |
| Ala | Met | Ala | Ser | Lys 170 | Pro | Ala | Thr | Thr | Ile 175 | Arg | Trp | Phe | Lys | Gly 180 |
| Asn | Thr | Glu | Leu | Lys 185 | Gly | Lys | Ser | Glu | Val 190 | Glu | Glu | Trp | Ser | Asp 195 |
| Met | Tyr | Thr | Val | Thr 200 | Ser | Gln | Leu | Met | Leu 205 | Lys | Val | His | Lys | Glu 210 |
| Asp | Asp | Gly | Val | Pro 215 | Val | Ile | Cys | Gln | Val 220 | Glu | His | Pro | Ala | Val 225 |
| Thr | Gly | Asn | Leu | Gln 230 | Thr | Gln | Arg | Tyr | Leu 235 | Glu | Val | Gln | Tyr | Lys 240 |
| Pro | Gln | Val | His | Ile 245 | Gln | Met | Thr | Tyr | Pro 250 | Leu | Gln | Gly | Leu | Thr 255 |
| Arg | Glu | Gly | Asp | Ala 260 | Leu | Glu | Leu | Thr | Cys 265 | Glu | Ala | Ile | Gly | Lys 270 |
| Pro | Gln | Pro | Val | Met 275 | Val | Thr | Trp | Val | Arg 280 | Val | Asp | Asp | Glu | Met 285 |
| Pro | Gln | His | Ala | Val 290 | Leu | Ser | Gly | Pro | Asn 295 | Leu | Phe | Ile | Asn | Asn 300 |
| Leu | Asn | Lys | Thr | Asp | Asn | Gly | Thr | Tyr | Arg | Cys | Glu | Ala | Ser | Asn |

| | | |
|-----------------|---------------------|-------------------------|
| 305 | 310 | 315 |
| Ile Val Gly Lys | Ala His Ser Asp Tyr | Met Leu Tyr Val Tyr Asp |
| 320 | 325 | 330 |
| Pro Pro Thr Thr | Ile Pro Pro Pro Thr | Thr Thr Thr Thr Thr Thr |
| 335 | 340 | 345 |
| Thr Thr Thr Thr | Thr Thr Ile Leu Thr | Ile Ile Thr Asp Ser Arg |
| 350 | 355 | 360 |
| Ala Gly Glu Glu | Gly Ser Ile Arg Ala | Val Asp His Ala Val Ile |
| 365 | 370 | 375 |
| Gly Gly Val Val | Ala Val Val Val Phe | Ala Met Leu Cys Leu Leu |
| 380 | 385 | 390 |
| Ile Ile Leu Gly | Arg Tyr Phe Ala Arg | His Lys Gly Thr Tyr Phe |
| 395 | 400 | 405 |
| Thr His Glu Ala | Lys Gly Ala Asp Asp | Ala Ala Asp Ala Asp Thr |
| 410 | 415 | 420 |
| Ala Ile Ile Asn | Ala Glu Gly Gly Gln | Asn Asn Ser Glu Glu Lys |
| 425 | 430 | 435 |
| Lys Glu Tyr Phe | Ile | |
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- <211> 24
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> Synthetic oligonucleotide probe
- <400> 62
- ggcttctgct gttgctcttc tccg 24
- <210> 63
- <211> 20
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> Synthetic oligonucleotide probe
- <400> 63
- gtacactgtg accagtcagc 20
- <210> 64
- <211> 20
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> Synthetic oligonucleotide probe


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<210> 65
<211> 24
<212> DNA
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<220>
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<400> 65
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<210> 66
<211> 24
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<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 66
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<210> 67
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<212> DNA
<213> Artificial Sequence

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<211> 2555
<212> DNA
<213> Homo Sapien

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  ggctccctgc gccgccgccg cctcccggga cagaagatgt gctccagggt 150
  ccctctgtcg ctgccgtgc tctgtctact ggccctgggg cctgggggtgc 200
  agggctgccc atccggctgc cagtgcagcc agccacagac agtcttctgc 250
  actgcccgcc aggggaccac ggtgccccga gacgtgccac ccgacacggt 300
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  ttgccggcct gccgggcctg cagctcctgg acctgtcaca gaaccagatc 400

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| | | | | | |
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| gcagcctgc | gcctgccccg | cctgtgtctg | ctggacctca | gccacaacag | 450 |
| cctcctggcc | ctggagccccg | gcacccctga | cactgccaac | gtggaggcgc | 500 |
| tgcggtctgc | tgggtctgggg | ctgcagcagc | tggacgaggg | gctcttcagc | 550 |
| cgcttgcgca | acctccacga | cctggatgtg | tccgacaacc | agctggagcg | 600 |
| agtgccacct | gtgatccgag | gcctccgggg | cctgacgcgc | ctgcggtctg | 650 |
| ccggcaacac | ccgcattgcc | cagctgcggc | ccgaggacct | ggccggcctg | 700 |
| gctgccctgc | aggagctgga | tgtgagcaac | ctaagcctgc | aggccctgcc | 750 |
| tggcgacctc | tggggcctct | tccccgcct | gcggctgtctg | gcagctgccc | 800 |
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| cccgcccaag | aacgtctggc | ggctgtctct | ggagcttgac | tacgccgact | 950 |
| ttggctgccc | agccaccacc | accacagcca | cagtgtccac | cacgaggccc | 1000 |
| gtggtgcggg | agcccacagc | cttgtcttct | agcttggtct | ctacctggct | 1050 |
| tagccccaca | gcgccggcca | ctgaggcccc | cagcccgcct | tccactgccc | 1100 |
| caccgactgt | agggcctgtc | ccccagcccc | aggactgccc | accgtccacc | 1150 |
| tgcctcaatg | ggggcacatg | ccacctgggg | acacgggcacc | acctggcgtg | 1200 |
| cttgtgcccc | gaaggcttca | cgggcctgta | ctgtgagagc | cagatggggc | 1250 |
| aggggacacg | gccagccct | acaccagtca | cgccgaggcc | accacggtcc | 1300 |
| ctgaccctgg | gcacgagcc | ggtgagcccc | acctccctgc | gcgtggggct | 1350 |
| gcagcgtac | ctccagggga | gtccgtgca | gtcaggagc | ctccgtctca | 1400 |
| cctatcgcaa | cctatcgggc | cctgataagc | ggctggtgac | gctgcgactg | 1450 |
| cctgcctcgc | tgcgtgagta | cacggtcacc | cagctgcggc | ccaacgccac | 1500 |
| ttactccgtc | tgtgtcatgc | ctttggggcc | cgggcgggtg | ccggagggcg | 1550 |
| aggaggcctg | cggggaggcc | cataaccccc | cagccgtcca | ctccaaccac | 1600 |
| gccccagtca | cccaggccccg | cgaggggcaac | ctgccgctcc | tcattgcgcc | 1650 |
| cgccctggcc | gcggtgctcc | tggccgcgct | ggctgcggtg | ggggcagcct | 1700 |
| actgtgtgcg | gcggggggcgg | gccatggcag | cagcggctca | ggacaaaggg | 1750 |
| cagggtggggc | caggggctgg | gccctggaa | ctggaggag | tgaaggtccc | 1800 |
| cttggagcca | ggcccgaagg | caacagaggg | cgggtggagag | gccctgcccc | 1850 |

| | | | | | |
|-----------------|-------------------------|-------------------------|-----|--|-----|
| | 110 | | 115 | | 120 |
| Ala Leu Arg Leu | Ala Gly Leu Gly Leu | Gln Gln Leu Asp Glu Gly | | | |
| | 125 | | 130 | | 135 |
| Leu Phe Ser Arg | Leu Arg Asn Leu His | Asp Leu Asp Val Ser Asp | | | |
| | 140 | | 145 | | 150 |
| Asn Gln Leu Glu | Arg Val Pro Pro Val | Ile Arg Gly Leu Arg Gly | | | |
| | 155 | | 160 | | 165 |
| Leu Thr Arg Leu | Arg Leu Ala Gly Asn Thr | Arg Ile Ala Gln Leu | | | |
| | 170 | | 175 | | 180 |
| Arg Pro Glu Asp | Leu Ala Gly Leu Ala | Ala Leu Gln Glu Leu Asp | | | |
| | 185 | | 190 | | 195 |
| Val Ser Asn Leu | Ser Leu Gln Ala Leu | Pro Gly Asp Leu Ser Gly | | | |
| | 200 | | 205 | | 210 |
| Leu Phe Pro Arg | Leu Arg Leu Leu Ala | Ala Ala Arg Asn Pro Phe | | | |
| | 215 | | 220 | | 225 |
| Asn Cys Val Cys | Pro Leu Ser Trp Phe | Gly Pro Trp Val Arg Glu | | | |
| | 230 | | 235 | | 240 |
| Ser His Val Thr | Leu Ala Ser Pro Glu | Glu Thr Arg Cys His Phe | | | |
| | 245 | | 250 | | 255 |
| Pro Pro Lys Asn | Ala Gly Arg Leu Leu | Leu Glu Leu Asp Tyr Ala | | | |
| | 260 | | 265 | | 270 |
| Asp Phe Gly Cys | Pro Ala Thr Thr Thr | Thr Ala Thr Val Pro Thr | | | |
| | 275 | | 280 | | 285 |
| Thr Arg Pro Val | Val Arg Glu Pro Thr | Ala Leu Ser Ser Ser Leu | | | |
| | 290 | | 295 | | 300 |
| Ala Pro Thr Trp | Leu Ser Pro Thr Ala | Pro Ala Thr Glu Ala Pro | | | |
| | 305 | | 310 | | 315 |
| Ser Pro Pro Ser | Thr Ala Pro Pro Thr | Val Gly Pro Val Pro Gln | | | |
| | 320 | | 325 | | 330 |
| Pro Gln Asp Cys | Pro Pro Ser Thr Cys | Leu Asn Gly Gly Thr Cys | | | |
| | 335 | | 340 | | 345 |
| His Leu Gly Thr | Arg His His Leu Ala | Cys Leu Cys Pro Glu Gly | | | |
| | 350 | | 355 | | 360 |
| Phe Thr Gly Leu | Tyr Cys Glu Ser Gln | Met Gly Gln Gly Thr Arg | | | |
| | 365 | | 370 | | 375 |
| Pro Ser Pro Thr | Pro Val Thr Pro Arg | Pro Pro Arg Ser Leu Thr | | | |
| | 380 | | 385 | | 390 |
| Leu Gly Ile Glu | Pro Val Ser Pro Thr | Ser Leu Arg Val Gly Leu | | | |
| | 395 | | 400 | | 405 |

| | | |
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| Gln Arg Tyr Leu | Gln Gly Ser Ser Val | Gln Leu Arg Ser Leu Arg |
| 410 | | 420 |
| Leu Thr Tyr Arg | Asn Leu Ser Gly Pro | Asp Lys Arg Leu Val Thr |
| 425 | | 435 |
| Leu Arg Leu Pro | Ala Ser Leu Ala Glu | Tyr Thr Val Thr Gln Leu |
| 440 | | 450 |
| Arg Pro Asn Ala | Thr Tyr Ser Val Cys | Val Met Pro Leu Gly Pro |
| 455 | | 465 |
| Gly Arg Val Pro | Glu Gly Glu Glu Ala | Cys Gly Glu Ala His Thr |
| 470 | | 480 |
| Pro Pro Ala Val | His Ser Asn His Ala | Pro Val Thr Gln Ala Arg |
| 485 | | 495 |
| Glu Gly Asn Leu | Pro Leu Leu Ile Ala | Pro Ala Leu Ala Ala Val |
| 500 | | 510 |
| Leu Leu Ala Ala | Leu Ala Ala Val Gly | Ala Ala Tyr Cys Val Arg |
| 515 | | 525 |
| Arg Gly Arg Ala | Met Ala Ala Ala Ala | Gln Asp Lys Gly Gln Val |
| 530 | | 540 |
| Gly Pro Gly Ala | Gly Pro Leu Glu Leu | Glu Gly Val Lys Val Pro |
| 545 | | 555 |
| Leu Glu Pro Gly | Pro Lys Ala Thr Glu | Gly Gly Gly Glu Ala Leu |
| 560 | | 570 |
| Pro Ser Gly Ser | Glu Cys Glu Val Pro | Leu Met Gly Phe Pro Gly |
| 575 | | 585 |
| Pro Gly Leu Gln | Ser Pro Leu His Ala | Lys Pro Tyr Ile |
| 590 | | 595 |

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<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 70

ccctccactg cccaccgac tg 22

<210> 71

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Pro | Ile | Asn | Ala | Thr | Ser | Lys | Asp | Asp | Ser | Asp | Val | Thr | Glu |
| | | | 125 | | | | | | 130 | | | | | 135 |
| Val | Met | Trp | Gln | Pro | Ala | Leu | Arg | Arg | Gly | Arg | Gly | Leu | Gln | Ala |
| | | | 140 | | | | | | 145 | | | | | 150 |
| Gln | Gly | Tyr | Gly | Val | Arg | Ile | Gln | Asp | Ala | Gly | Val | Tyr | Leu | Leu |
| | | | 155 | | | | | | 160 | | | | | 165 |
| Tyr | Ser | Gln | Val | Leu | Phe | Gln | Asp | Val | Thr | Phe | Thr | Met | Gly | Gln |
| | | | 170 | | | | | | 175 | | | | | 180 |
| Val | Val | Ser | Arg | Glu | Gly | Gln | Gly | Arg | Gln | Glu | Thr | Leu | Phe | Arg |
| | | | 185 | | | | | | 190 | | | | | 195 |
| Cys | Ile | Arg | Ser | Met | Pro | Ser | His | Pro | Asp | Arg | Ala | Tyr | Asn | Ser |
| | | | 200 | | | | | | 205 | | | | | 210 |
| Cys | Tyr | Ser | Ala | Gly | Val | Phe | His | Leu | His | Gln | Gly | Asp | Ile | Leu |
| | | | 215 | | | | | | 220 | | | | | 225 |
| Ser | Val | Ile | Ile | Pro | Arg | Ala | Arg | Ala | Lys | Leu | Asn | Leu | Ser | Pro |
| | | | 230 | | | | | | 235 | | | | | 240 |
| His | Gly | Thr | Phe | Leu | Gly | Phe | Val | Lys | Leu | | | | | |
| | | | 245 | | | | | | 250 | | | | | |

<210> 77
 <211> 2849
 <212> DNA
 <213> Homo Sapien

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 tgtgcatcgc cccggacctg gccgggagga ggcttggccg gcgggagatg 250
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 ggtgggcccg aagaagccca tgcacagcaa ccaactactac cagacggtga 800
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 <211> 281
 <212> PRT
 <213> Homo Sapien

<400> 78
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 20 25 30
 Gln Gly Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser
 35 40 45
 Pro Pro Asp His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr
 50 55 60
 Arg Pro Ser Gln Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg
 65 70 75
 Cys Cys Asp Pro Gly Thr Ser Met Tyr Pro Ala Thr Ala Val Pro
 80 85 90
 Gln Ile Asn Ile Thr Ile Leu Lys Gly Glu Lys Gly Asp Arg Gly
 95 100 105
 Asp Arg Gly Leu Gln Gly Lys Tyr Gly Lys Thr Gly Ser Ala Gly

| | | |
|---|-----|-----|
| 110 | 115 | 120 |
| Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly | | |
| 125 | 130 | 135 |
| Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val | | |
| 140 | 145 | 150 |
| Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val | | |
| 155 | 160 | 165 |
| Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met | | |
| 170 | 175 | 180 |
| Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe | | |
| 185 | 190 | 195 |
| Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His | | |
| 200 | 205 | 210 |
| Ile Met Lys Asn Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val | | |
| 215 | 220 | 225 |
| Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu | | |
| 230 | 235 | 240 |
| Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg | | |
| 245 | 250 | 255 |
| Glu Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe | | |
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| Ser Gly Tyr Leu Val Lys His Ala Thr Glu Pro | | |
| 275 | 280 | |

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 <212> DNA
 <213> Artificial Sequence

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 <223> Synthetic oligonucleotide probe

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<210> 80
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 80
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<210> 81

<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 81
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<210> 82
<211> 2284
<212> DNA
<213> Homo Sapien

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 tgggtgtcctg ttcttggtga taggcctcgt cctcctgggt agaatecttt 1450
 cggaatcact ccgcaggaaa cgttactcaa gactggatta tttgatcaat 1500
 gggatctatg tggacatcta aggatggaac tcggtgtctc ttaattcatt 1550
 tagtaaccag aagcccaa at gcaatgagtt tctgctgact tgctagtctt 1600
 agcaggaggt tgtattttga agacaggaaa atgccccctt ctgctttcct 1650
 tttttttttt ggagacagag tcttgctctg ttgcccaggc tggagtgcag 1700
 tagcacgac tcggtctctc ccgcaacctc cgtctcctgg gttcaagega 1750
 ttctcctgcc tcagcctcct aagtatctgg gattacaggc atgtgccacc 1800
 acacctgggt gatttttgta tttttagtag agacgggggt tcaccatggt 1850
 ggtcaggctg gtctcaaact cctgacctag tgatccacc tcctoggcct 1900
 cccaaagtgc tgggattaca ggcatgagcc accacagctg gcccccttct 1950
 gttttatggt tgggttttga gaaggaatga agtgggaacc aaattaggta 2000
 attttgggta atctgtctct aaaatattag ctaaaaacaa agctctatgt 2050
 aaagtaataa agtataattg ccatataaat ttcaaaattc aactggcttt 2100
 tatgcaaaga aacaggttag gacatctagg ttccaattca ttcacattct 2150
 tggttccaga taaaatcaac tgtttatata aatttcta at ggatttgctt 2200
 ttctttttat atggattcct ttaaaactta ttccagatgt agttccttcc 2250
 aattaaatat ttgaataaat cttttgttac tcaa 2284

<210> 83
 <211> 431
 <212> PRT
 <213> Homo Sapien

<400> 83
 Met Phe Phe Gly Gly Glu Gly Ser Leu Thr Tyr Thr Leu Val Ile
 1 5 10 15

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Cys | Phe | Leu | Thr | Leu | Arg | Leu | Ser | Ala | Ser | Gln | Asn | Cys | Leu |
| | | | | 20 | | | | | 25 | | | | | 30 |
| Lys | Lys | Ser | Leu | Glu | Asp | Val | Val | Ile | Asp | Ile | Gln | Ser | Ser | Leu |
| | | | | 35 | | | | | 40 | | | | | 45 |
| Ser | Lys | Gly | Ile | Arg | Gly | Asn | Glu | Pro | Val | Tyr | Thr | Ser | Thr | Gln |
| | | | | 50 | | | | | 55 | | | | | 60 |
| Glu | Asp | Cys | Ile | Asn | Ser | Cys | Cys | Ser | Thr | Lys | Asn | Ile | Ser | Gly |
| | | | | 65 | | | | | 70 | | | | | 75 |
| Asp | Lys | Ala | Cys | Asn | Leu | Met | Ile | Phe | Asp | Thr | Arg | Lys | Thr | Ala |
| | | | | 80 | | | | | 85 | | | | | 90 |
| Arg | Gln | Pro | Asn | Cys | Tyr | Leu | Phe | Phe | Cys | Pro | Asn | Glu | Glu | Ala |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Cys | Pro | Leu | Lys | Pro | Ala | Lys | Gly | Leu | Met | Ser | Tyr | Arg | Ile | Ile |
| | | | | 110 | | | | | 115 | | | | | 120 |
| Thr | Asp | Phe | Pro | Ser | Leu | Thr | Arg | Asn | Leu | Pro | Ser | Gln | Glu | Leu |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Pro | Gln | Glu | Asp | Ser | Leu | Leu | His | Gly | Gln | Phe | Ser | Gln | Ala | Val |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Thr | Pro | Leu | Ala | His | His | His | Thr | Asp | Tyr | Ser | Lys | Pro | Thr | Asp |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Ile | Ser | Trp | Arg | Asp | Thr | Leu | Ser | Gln | Lys | Phe | Gly | Ser | Ser | Asp |
| | | | | 170 | | | | | 175 | | | | | 180 |
| His | Leu | Glu | Lys | Leu | Phe | Lys | Met | Asp | Glu | Ala | Ser | Ala | Gln | Leu |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Leu | Ala | Tyr | Lys | Glu | Lys | Gly | His | Ser | Gln | Ser | Ser | Gln | Phe | Ser |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Ser | Asp | Gln | Glu | Ile | Ala | His | Leu | Leu | Pro | Glu | Asn | Val | Ser | Ala |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Leu | Pro | Ala | Thr | Val | Ala | Val | Ala | Ser | Pro | His | Thr | Thr | Ser | Ala |
| | | | | 230 | | | | | 235 | | | | | 240 |
| Thr | Pro | Lys | Pro | Ala | Thr | Leu | Leu | Pro | Thr | Asn | Ala | Ser | Val | Thr |
| | | | | 245 | | | | | 250 | | | | | 255 |
| Pro | Ser | Gly | Thr | Ser | Gln | Pro | Gln | Leu | Ala | Thr | Thr | Ala | Pro | Pro |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Val | Thr | Thr | Val | Thr | Ser | Gln | Pro | Pro | Thr | Thr | Leu | Ile | Ser | Thr |
| | | | | 275 | | | | | 280 | | | | | 285 |
| Val | Phe | Thr | Arg | Ala | Ala | Ala | Thr | Leu | Gln | Ala | Met | Ala | Thr | Thr |
| | | | | 290 | | | | | 295 | | | | | 300 |
| Ala | Val | Leu | Thr | Thr | Thr | Phe | Gln | Ala | Pro | Thr | Asp | Ser | Lys | Gly |

<210> 87
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 87
 caccgtagct gggagcgcac tcac 24

<210> 88
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 88
 agtgtaagtc aagctccc 18

<210> 89
 <211> 49
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 89
 gcttcctgac actaaggctg tctgctagtc agaattgcct caaaaagag 49

<210> 90
 <211> 957
 <212> DNA
 <213> Homo Sapien

<400> 90
 cctggaagat gcgcccattg gctggtggcc tgctcaaggt ggtgttcgtg 50
 gtcttcgcct ccttgtgtgc ctggtattcg gggtagctgc tcgcagagct 100
 cattccagat gcaccctgt ccagtgtgc ctatagcatc cgcagcatcg 150
 gggagaggcc tgtcctcaaa gctccagtcc caaaaggca aaaatgtgac 200
 cactggactc cctgcccatac tgacacctat gcctacaggt tactcagcgg 250
 aggtggcaga agcaagtacg ccaaaatctg ctttgaggat aacctactta 300
 tgggagaaca gctgggaaat gttgccagag gaataaacat tgccattgtc 350
 aactatgtaa ctgggaatgt gacagcaaca cgatgttttg atatgtatga 400
 aggcgataac tctggaccga tgacaaagtt tattcagagt gctgctccaa 450
 aatccctgct cttcatgggtg acctatgacg acggaagcac aagactgaat 500

aacgatgcc aagaatgccat agaagcactt ggaagtaaag aaatcaggaa 550
catgaaattc aggtctagct ggggtatttat tgcagcaaaa ggcttggaac 600
tcccttccga aattcagaga gaaaagatca accactctga tgctaagaac 650
aacagatatt ctggctggcc tgcagagatc cagatagaag gctgcatacc 700
caaagaacga agctgacact gcagggtcct gagtaaagt gttctgtata 750
aacaatatga gctggaatcg ctcaagaatc ttatttttct aaatccaaca 800
gcccataatt gatgagtatt ttgggtttgt tgtaaacc aa tgaacatttg 850
ctagttgtat caaatcttgg tacgcagtat tttatacca gtattttatg 900
tagtgaagat gtcaattagc aggaaactaa aatgaatgga aattcttaaa 950
aaaaaaa 957

<210> 91
<211> 235
<212> PRT
<213> Homo Sapien

<400> 91
Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val
1 5 10 15
Phe Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu
20 25 30
Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg
35 40 45
Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg
50 55 60
Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala
65 70 75
Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile
80 85 90
Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val
95 100 105
Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn
110 115 120
Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser
125 130 135
Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu
140 145 150
Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn
155 160 165

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ala | Lys | Asn | Ala | Ile | Glu | Ala | Leu | Gly | Ser | Lys | Glu | Ile | Arg |
| | | | 170 | | | | | | 175 | | | | | 180 |
| Asn | Met | Lys | Phe | Arg | Ser | Ser | Trp | Val | Phe | Ile | Ala | Ala | Lys | Gly |
| | | | 185 | | | | | | 190 | | | | | 195 |
| Leu | Glu | Leu | Pro | Ser | Glu | Ile | Gln | Arg | Glu | Lys | Ile | Asn | His | Ser |
| | | | 200 | | | | | | 205 | | | | | 210 |
| Asp | Ala | Lys | Asn | Asn | Arg | Tyr | Ser | Gly | Trp | Pro | Ala | Glu | Ile | Gln |
| | | | 215 | | | | | | 220 | | | | | 225 |
| Ile | Glu | Gly | Cys | Ile | Pro | Lys | Glu | Arg | Ser | | | | | |
| | | | 230 | | | | | | 235 | | | | | |

<210> 92

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 92

aatgtgacca ctggactccc 20

<210> 93

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 93

aggcttgga ctccttc 18

<210> 94

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 94

aagattcttg agcgattcca gctg 24

<210> 95

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 95

aatccctgct cttcatgggtg acctatgacg acggaagcac aagactg 47

<210> 96
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 96
 ctcaagaagc acgcgtactg c 21

<210> 97
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 97
 ccaacctcag cttccgctc tacga 25

<210> 98
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 98
 catccaggct cgccactg 18

<210> 99
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 99
 tggcaaggaa tggaacagt 20

<210> 100
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 100
 atgctgccag acctgatcg agaca 25

<210> 101
 <211> 19
 <212> DNA

<223> Synthetic oligonucleotide probe

<400> 106

tggeccagct gacgagccct 20

<210> 107

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 107

ctcataggca ctcggttctg g 21

<210> 108

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 108

tggtcccag cttggaaga 19

<210> 109

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 109

cagctcttgg ctgtctccag tatgtacca 30

<210> 110

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 110

gatgctctg ttctgcaca t 21

<210> 111

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 111

ggattctaatt acgactcact atagggctgc ccgcaacccc ttcaactg 48

<210> 112

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 112

ctatgaaatt aaccctcact aaagggaccg cagctgggtg accgtgta 48

<210> 113

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 113

ggattctaatt acgactcact atagggccgc cccgccacct cct 43

<210> 114

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 114

ctatgaaatt aaccctcact aaagggactc gagacaccac ctgaccca 48

<210> 115

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 115

ggattctaatt acgactcact atagggccca aggaaggcag gagactct 48

<210> 116

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide probe

<400> 116

ctatgaaatt aaccctcact aaagggacta ggggggtggga atgaaaag 48

<210> 117

